

Physicians take on vital new role: COVID-19 vaccine myth-busters

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Susan R. Bailey, MD

Immediate Past President

Our nation has never been closer to ending the COVID-19 pandemic than it is today. But while about half of U.S. adults are now fully vaccinated against the virus—contributing to a sharp drop in both new infections and deaths—a significant number of people remain hesitant to receive the shot for personal, religious or political reasons.

As physicians, we play important roles as vaccine ambassadors for our patients, offering encouragement and answering their most urgent questions. Just as importantly in this new age of anti-vaccine rhetoric, we must dispel common myths and falsehoods that our patients come across, and work to maintain the trust that is at the heart of the patient-physician relationship.

Research tells us that some people who may distrust large hospital systems, public health institutions or the government still tend to trust their personal physicians. That gives physicians the opportunity, and the responsibility, to do everything possible to ensure people are armed with the right information about these safe and effective COVID-19 vaccines. Providing vaccines to frontline physician offices, and ensuring that physicians are adequately compensated for administering them to patients, fosters greater acceptance and wider availability.

Last week, the AMA hosted a webinar to help physicians counter some of the most frequent vaccine myths and misinformation. Our expert panel also provided keen insights and research into the best language to use to build vaccine confidence. Like all of the webinars in our “COVID-19: What Physicians Need to Know” series, this one features insights from experts inside and outside the AMA and is available for viewing on our website.

The AMA offers a broad array of resources and tools to knock down pervasive vaccine myths and misinformation, such as this messaging guide for physicians. Additional insights on overcoming hesitancy can be gleaned from this installment of the AMA STEPS Forward™ webinar series: “Vaccinations: Roadmap for Success.”

The de Beaumont Foundation, whose CEO was a part of last week’s panel, also offers practical

information to help physicians build vaccine confidence among their patients. Also, the AMA has partnered with the Ad Council, the COVID Collaborative and the CDC to help people make informed decisions about vaccinations for themselves and their families; all the details can be found at [GetVaccineAnswers.org](https://www.getvaccineanswers.org) (or in Spanish at [DeTiDepende.org](https://www.detidedepende.org)).

Strong reasons for confidence

Negative attitudes and mistrust in the COVID-19 vaccines have been around long before the vaccines were ever made available to the public—much of it driven by politics or by concerns about the accelerated production timeline.

The facts are that since the first vaccines were authorized in December, hundreds of millions of doses have been administered in the U.S., with more than 1 billion given worldwide. If longer-term safety concerns were an issue, they would have emerged by now. They have not. Research continues to yield a sound understanding of how the immune system and vaccines work, so we can be confident that an injury will not occur months or years later on.

Another fact is that the COVID-19 vaccines available to us today are grounded in decades of scientific research; they are in no way experimental or unproven. While the vaccines were made available through an emergency use authorization—a long-standing regulatory path created specifically for a public-health emergency like the one we are experiencing—no steps were skipped nor any shortcuts taken in their development or testing.

The speed with which the vaccines became available following FDA authorization lies with the fact that manufacturing began beforehand because of federal financial support and a reduction of bureaucratic red tape.

Explaining how vaccines work

Also, COVID-19 vaccines have no effect on, and cannot alter, a person's DNA. The genetic materials in mRNA vaccines (Pfizer and Moderna) as well as in adenovirus vectored vaccines (Johnson & Johnson) never enter the nucleus of the cell and thus cannot interact with human DNA.

Genetic messages in the vaccines remain outside the cell nucleus where they quickly deliver a message to the cell to build the SARS-CoV-2 spike protein on the outside of the cell. After that, the cell breaks down the genetic material and gets rid of it within a few days as a part of normal cellular function that takes place each day. Our patients should also know that no vaccine currently

authorized for use in the U.S. contains any live SARS-CoV-2 virus.

In some individuals, generating an immune response after vaccination can trigger flu-like symptoms. This is a result of their bodies mounting an immune response to the vaccine. Such side effects are commonly experienced with other vaccines as well, such as the seasonal flu shot or the shingles vaccine. They are a normal reaction to vaccination but not an actual infection.

It is important to note that there are multiple reporting mechanisms in place, such as the Vaccine Adverse Event Reporting System, to help the CDC and FDA ensure that all vaccines, including the COVID-19 vaccines, are safe. These reporting systems are robust and effective, as demonstrated by the temporary pause on administration of the Johnson & Johnson/Janssen vaccine to investigate reports of thrombosis with thrombocytopenia syndrome (TTS).

The pause was lifted when it was determined that the known and potential benefits of the J&J/Janssen vaccine far outweighed its known and potential risks to those recommended to receive it. Detecting and investigating rare adverse events such as TTS are evidence of the commitment to safety, transparency and effectiveness of the monitoring systems in place for COVID-19 vaccines.

For well more than a year now, our nation has struggled under a burden that has taken nearly 600,000 loved ones from us and altered nearly every aspect of our daily lives. Now that we stand on the brink of bringing this tragic chapter in our nation's history to a close, we must double down on our efforts to emphasize facts and eliminate misinformation. COVID-19 vaccines give us the tools we need to defeat this pandemic, and spreading the facts and evidence-based science behind these tools to everyone in our community is the key to victory.